



**TOUCH  
SCREEN**

**WINBD 21 Plus**

**3 PART DIFFERENTIAL  
HEMATOLOGY ANALYER**

- Instrument for Complete Blood Count with 3 Part Differentiation of WBC Population
- 21 Parameters with 3 Histogram
- Built-in 10.4-inch LCD
- User interface via Touch Screen, External Key Pad and Mouse can also be attached using USB Port
- Automatic Start Up, Shut Down and Sample Analysis
- Auto Probe wiping facility to avoid carryover
- Floating discriminator for all 3 Blood Cells
- 9 User defined Normal Range
- Auto or Manual Calibration Facility
- Excellent Data Management using Self Protected Linux Operating System
- Storage of 1,00,000 Patient Results with Histogram
- Dedicated 4 QC Menu comprising of L-J, X-R, X-B & X
- 4 USB Port, for System Upgradation, Back-Up or to connect system with External Printer, Key Board, Mouse etc.
- Supports LIS/HIS & HL 7 protocol
- Automatic Maintenance with Alarm Setting
- Reagent inventory Management
- Close System with RFID Detection

## Specifications:

### Parameters:

WBC, LY#, MID#, GRAN#, LY%, MID%, GRAN%, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, MPV, PDW, PCT, P-LCR, P-LCC  
Dual transducer/chamber CBC mode with differentials of WBC, 21 parameters and 3 Histograms

### Principles of Operation:

WBC/RBC/PLT : Electrical Impedance/Electrical Resistance/Counting/Sizing  
Pulse Height detection method  
HGB : Photoelectric colorimetry (cyanide free)

### Aspiration Volume:

Whole blood 10µL, Pre-diluted 20µL

### Analysis Mode:

Whole blood  
Pre-diluted

### Aperture Diameter:

WBC 100µm, RBC/PLT 68µm

### Throughput:

60 samples per hour

### Data Storage:

100,000 sample results with histograms

### Alarm:

Error messages

### Linearity:

Parameter	Linearity Range	Acceptable Limits
WBC	$0 \times 10^9 /L - 10.0 \times 10^9 /L$	$\leq \pm 0.3 \times 10^9 /L$
	$10.1 \times 10^9 /L - 99.9 \times 10^9 /L$	$\leq \pm 5\%$
RBC	$0 \times 10^{12} /L - 1.00 \times 10^{12} /L$	$\leq \pm 0.05 \times 10^{12} /L$
	$1.01 \times 10^{12} /L - 9.99 \times 10^{12} /L$	$\leq \pm 5\%$
HGB	0 g /L - 70 g/L	$\leq \pm 2 \text{ g/L}$
	71 g/L - 300 g/L	$\leq \pm 2\%$
PLT	$0 \times 10^9 /L - 100 \times 10^9 /L$	$\leq \pm 10 \times 10^9 /L$
	$101 \times 10^9 /L - 999 \times 10^9 /L$	$\leq \pm 10\%$

### Dilution Ratio:

	Whole blood	Capillary blood
WBC/HGB	1:232	1:400
RBC/PLT	1:40000	1:45000

### User Interface:

10.4 inches color LCD displaying 21 parameters & histograms

### QC & Calibration:

L-J,X,X-R,X-B four QC options  
Manual and auto-Calibration

### Dimension:

330mm x 440mm x 500mm

### Power Requirement:

AC 100V --- 240V, 50/60Hz, 180W

### Input/Output:

4 USB Port  
Internal 57mm thermal printer, Parallel Port

### Electrical Safety Standards:

EN 61010-1:2010, EN 61010-2-101

# WINBD 21 Plus



System check



Counting results



System Maintenance



System Log

Marketed in India by :

## WINBD Biotech

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